

尼川大録*: 日本産苔類報告 (10)

Tairoku AMAKAWA*: Notes on Japanese Hepaticae (10)

- 32) **Campylolejeunea peculiaris** (Herz.) Amakawa, comb. nob. (Fig. 18)
Physocolea peculiaris Herz. Mitt. Inst. Allg. Bot. Hamburg 7: 216 (1931).
Cololejeunea (*Cryptolejeunea*) *peculiaris* (Herz.) Benedix, Feddes Repert. 134: 80, f. 30 (1953).

Plants rather small, olive-green, closely adherent to substratum. Stems 5 mm. long, 0.12 mm. in diameter, with leaves 1.6 mm. wide, pinnately branched. Rhizoids rather numerous, fasciculate, occurring from small cells (much smaller than cortical cells of stem) of rhizoid-initial regions. Leaves slightly imbricate, obliquely spreading. Dorsal lobe concave, in plane asymmetrically obovate-oblong, 1 mm. long 0.7–0.8 mm. wide, apex rounded, margin entire, postical margin ampliate forming lunate sinus with keel. Keel moderately arched. Cells along leaf margin $15-16 \times 12-15 \mu$, in middle $18-22 \times 15-20 \mu$, near base $36-50 \times 15-20 \mu$, walls thin or slightly thickened, intermediate thickenings distinct near base, nodulose to confluent, trigones rather small; cuticle smooth. Lobule large, about half the length of lobe, 0.45 mm. long, 0.2 mm. wide, strongly inflated throughout, 2-toothed at apex, apical tooth straight, composed of 3 cells in a row, proximal tooth more valid, nearly parallel to or \pm divergent from apical one, composed of 3–(4) cells in a row, free margin widely and strongly involuted, nearly entire. Stylus single-celled, papillose, usually falling off early. Female inflorescence on very short leafless branches (pseudolateral), without innovations. Bracts erect-spreading, lobe subequal to leaves in size; lobule longer than half the length of lobe, \pm plane, margin entire. Perianth pyriform, 1 mm. long, 0.6 mm. wide, dorsiventrally compressed, 5-plicate, lateral plicae largest, postical ones small, both sharply winged, apical plica obtus, indistinct and lacking wing.

Hab. Mixed with *Dendroceros japonicus*, *Erachiolejeunea sandvicensis*, *Fruilania uvifera* etc. on high branches of tree. Isl. Okinawa: Mt. Yonaha, 480 m. s.m. Coll. Ch. Miyagi, T. Amano and T. Amakawa no. 2937, Jul. 25, 1959.

Range: Sumatra, Java, Borneo. New to Ryūkyū.

The present genus was established by Hattori 1947, including 3 species—the

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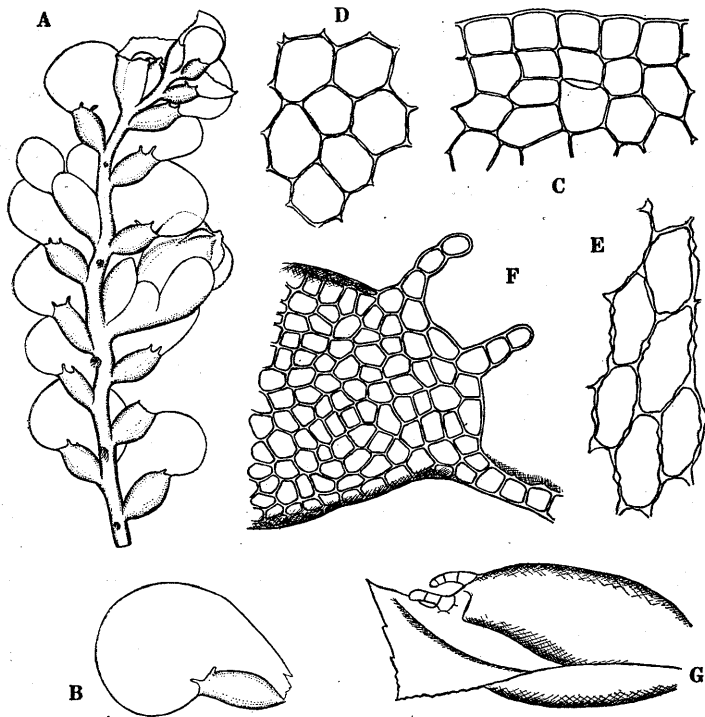


Fig. 18. *Campylolejeunea peculiaris* (Herz.) A. Part of female plant, ventral view, $\times 17$. B. Leaf, $\times 28$. C. Cells along leaf margin, $\times 355$. D. Cells from leaf middle, $\times 355$. E. Cells near leaf base, $\times 355$. F. Apex of leaf lobule, ventral v., $\times 175$. G. Involved free margin of lobule (the greater part of leaf lobe dissected off), dorsal v., $\times 80$. All figures were drawn from the specim. T. Amakawa 2937.

type *Campylolejeunea shibatae* Hatt (1951) from New Guinea and two others, *C. ciliatilobula* (Schffn.) and *C. vesicaria* (S. Lac.). He pointed out as the generic characteristics as follows: (1) Plants big and stout (comparing with *Cololejeunea*), brownish; (2) Leaves imbricate, margin strongly incurved; (3) Lobules large, spreading, apex 2-toothed, free margin strongly involuted and with 2~several teeth or cilia; (4) Hyaline papilla proximal at the base of apical tooth; (5) Female inflorescence on short branches; (6) Male inflorescence on short branches forming lateral spikes.

Benedix (1953) proposed Subgenus *Cryptolejeunea* in his studies on 'Indomalayische Cololejeuneen' and enumerated 4 species: *Cololejeunea* (*Cryptolejeunea*)

vesicaria (S. Lac.), *C. inflectidens* (Mitt.), *C. ciliatilobula* Schffn. and *C. peculiaris* (Herz.) He could not study the generic diagnose of the Hattori's genus of 1947 (in *Biosphaera*) and referred, (p. 77, footnote), 'Sollte ein späterer Vergleich an Hand von "Biosphaera" l.c. ergeben, dass der Umfang beider Gattungsdiagnosen sich deckt, so musste aus Prioritätsgründen—*Cryptolejeunea* Bx. durch *Campylolejeunea* Hatt. ersetzt werden'.

I think *Cryptolejeunea* falls to the synonym of *Campylolejeunea*, although the generic diagnose must be extended to accept *Physocolea peculiaris* Herz. which has entire free margin of leaf lobules.

I believe *Campylolejeunea* well deserves a independent genus, although it is very close to *Cololejeunea*, by the above mentioned characteristics and its perianth form which sharply 4-winged (2 lateral largest).

33) **Leptolejeunea apiculata** (Horik.) Hatt. (Eig. 19, A-M)

Jour. Hattori Bot. Lab. 5: 46 (1951). *Drepanolejeunea apiculata* Horik. Jour. Sci. Hiroshima Univ. B-2, 2: 46, f. 54 (1934).

Plants rather large, blackish brown, in thin mats. Stems prostrate, about 10mm. long, 0.07mm. in diameter, with leaves 1.2mm. wide, irregularly 1-2-pinnately branched, branches widely spreading. Rhizoids numerous, fasciculate, from rhizoid-initial cells of basal region of underleaves. Leaves rather distant, obliquely spreading. Dorsal lobe nearly plane, asymmetrically rhomboid-obovate, 0.5-0.7mm. long, 0.3-0.4mm. wide (widest at apical one third), apex apiculate with 1-2 cells in a single row, margin nearly entire, postical margin forming a continuous line with keel. Cells of leaf apex $18-22 \times 15 \mu$, in middle $22-30 \times 15-22 \mu$, near base $30-40 \times 20 \mu$, walls thin, trigones and intermediate thickenings distinct; cuticle smooth; ocelli 3-4, scarcely larger than the ordinary cells, irregularly scattered, sometimes indistinct; basal ocellus measuring $75 \times 20 \mu$, sometimes indistinct. Lobule oblong-ovate 0.2-0.3mm. long, 0.1mm. wide, inflated beyond the middle, free margin nearly straight, outer portion (including apical tooth) appressed to lobe, apical tooth slightly curved, hyaline papilla in a distinct impression, making the lobule appear bidentate at apex. Underleaves distant, large, 4 times wider than stem, 2-lobed, basal portion broadly trapezoidal in outline, 0.7mm. long, 0.2mm. long, 0.2mm. wide, composed of numerous small central cells surrounded by 6 much larger marginal cells (2 in sinus, 2 on each side), sinus widely lunate, lobes setaceous, obliquely spreading, 0.08mm. long, usually composed of apical 1-2 cells in single row and 6 cells in 2 row. Plants dioicous. Male inflorescence on short lateral

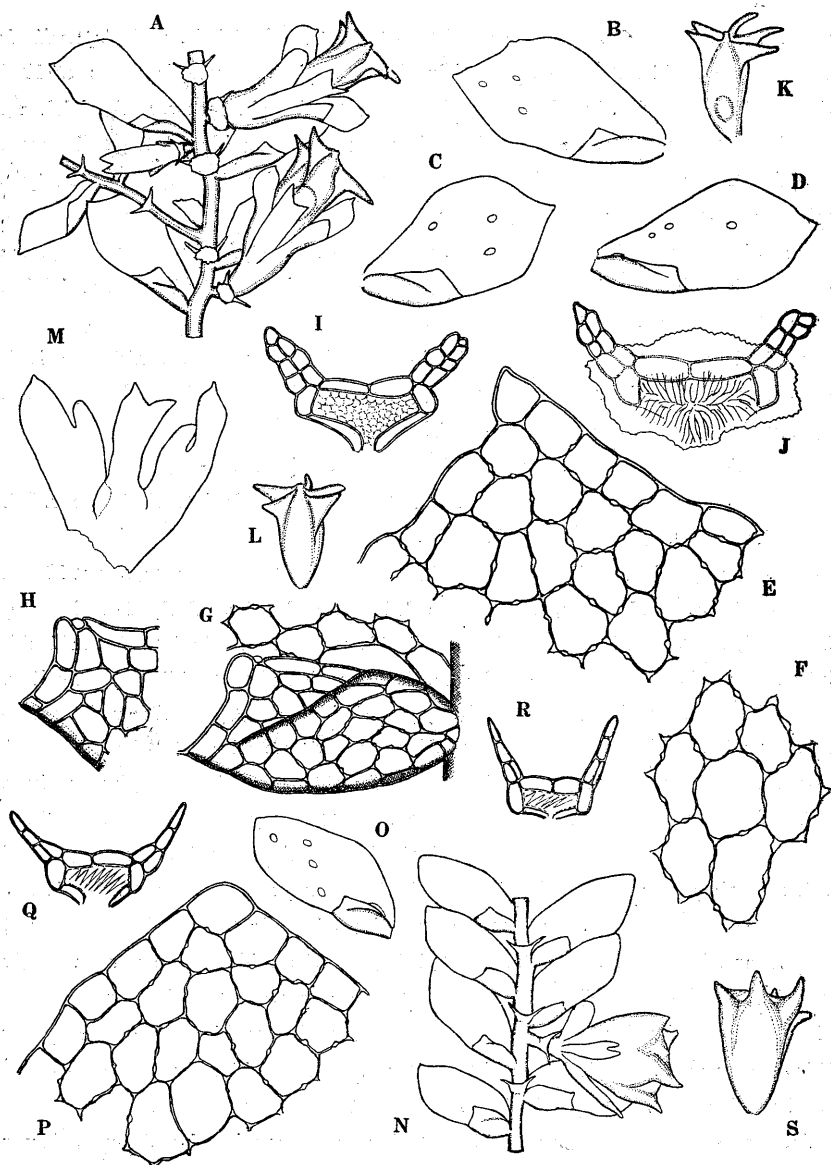


Fig. 19. *Leptolejeunea apiculata* (Horik.) Hatt. (A-M) A Part of female plant, dorsal view, $\times 28$. B, D. Leaves, $\times 44$. E. Cells of leaf apex, $\times 355$. F. Cells from leaf middle, $\times 355$. G. leaf lobule, ventral., $\times 175$. H. Apex of leaf lobule, ventral v., $\times 175$. I-J. Underleaves, $\times 110$. K-L. Perianths, $\times 28$. M. Bracts and beacteole, $\times 44$. Figures were drawn from T.A.2968. *Leptolejeunea subacuta* Steph. (N-S) N. Part of female plant, dorsal v., $\times 28$. O. Leaf, $\times 44$. P. Cells of leaf apex, $\times 355$. Q-R. Underleaves, $\times 110$. S. Perianth, $\times 28$. Drawn from T.A. 2974

branches, spike-like; bracts 4-5 pairs shortly 2-bilobed, complicately concave with arched keels. Female inflorescence on very short branches. Bracts unequally bifid: lobe 0.6 mm. long, 0.08-0.11 mm. wide, with apiculate apex; lobule 0.5 mm. long, 0.06 mm. wide with blunt apex. Bracteole united at base with both bracts, 0.55 mm. long, 0.2-0.3 mm. wide, 1/7-bifid, with subacute sinus and divergent triangular lobes. Perianth about 1/3-1/2-emergent, obconic, 0.5 mm. long, 0.2-0.3 mm. wide, lunate at tip, terete, below, 5-keeled in upper part, keels sharp, smooth, horn-shaped, mouth with short beak.

Hab. On living leaves of *Rhododendron tashiroi*, *Distylium racemosum*, ? *Symplocos cochinchinensis*, etc. Isl. Okinawa: Mt. Yonaha, 450 m. s.m. Coll. T. Amakawa 2968, 2969, Jul. 25, 1959.

Range: Ryūkyū (Isl. Amami-ōshima, new to Isl. Okinawa) and Formosa.

The present species was originally proposed by Horikawa (1934) as *Drepanolejeunea apiculata* in sterile condition from Formosa. Hara (1957) reported it from Ryūkyū (Amami-ōshima). T. Amano and I collected floriferous plants. It is distinguished from the most common epiphyllous species of Japan, *Leptolejeunea subacuta* Evans (Fig. 19, N-S) by the following key:

- | | | |
|---|--|---------------------|
| { | Leaves rhomboid-oblong with subacute~obtuse apex. Lobes of underleaves composed of 3-(4) cells in a single row, rarely, 2 cells wide at base..... | <i>L. subacuta</i> |
| | Leaves rhomboid-obovate (upper 1/3 toe widest) with apiculate apex (often composed of 2 cells in a row). Lobes of underleaves composed of 6 cells in 2 rows and mostly tipped with a cell..... | <i>L. apiculata</i> |

1959 年 7 月沖縄島において採集した 2 種について報告する。

32) マキクサリゴケ (新称) を与那覇岳で採集した。Bendix (1953) が 'Indo-malaysische Cololejeuneen' において創設した亜属 *Cryptolejeunea* は本属の異名に落ちるもので、このことは彼も認めている。彼は近縁の属をまとめて *Cololejeunea* を大属とした。その処置は大体同感であるが、*Campylolejeunea* はその大形剛強の点でも一見して *Cololejeunea* と区別できるもので、独立属に値するものと信じる。琉球には新産の属である。

33) トガリカビゴケ (新称) は堀川 (1934) によつて sterile の標本に基づいて台湾から報告された。今度与那覇岳で花被をつけた良い標本を得たので図説した。琉球では 2 番目の産地である。西南日本における最もふつうな生葉上苔であるカビゴケに近いが、葉形・腹葉裂片の細胞の排列などで区別できる。

与那覇岳の採集の際に同行して採集を助けられた天野鉄夫、宮城朝章両氏に謝意を表する。

References

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Errata

正 誤

	Page	Line	for	read
Vol. 29 , No. 6.	177	11	北海道の前にタカネヤバネゴゲのを加う	
	178	5 from below	humidae	humidas
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Vol. 31 , No. 2.	48	10	exerta	exserta
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Vol. 32 , No. 2.	38	17	存在するの次に2 を加える。	
	No. 6.	168	尖円形	円形
	No. 7.	217	contract	contracto
	"	9	similla	simillima
Vol. 33 , No. 11.	341	2 from below	insert rather large and not before numerous	
	343	7	Sele-	Sole-